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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/673,580	09/30/2003	Kenji Kawasaki	009523-0306199	1610
909	7590	03/08/2005	EXAMINER	
PILLSBURY WINTHROP, LLP			FINEMAN, LEE A	
P.O. BOX 10500			ART UNIT	
MCLEAN, VA 22102			PAPER NUMBER	
			2872	

DATE MAILED: 03/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/673,580

Applicant(s)

KAWASAKI ET AL.

Examiner

Lee Fineman

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 December 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-34 is/are pending in the application.
- 4a) Of the above claim(s) 1-12, 14-21, 23 and 26-34 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 13, 22 and 24 is/are rejected.
- 7) ☒ Claim(s) 25 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 9/30/03 & 1/14/04 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☒ Certified copies of the priority documents have been received in Application No. 09/726479.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 9/30/03.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Election/Restrictions

1. Applicant's election of Group IV, species c in the reply filed on 15 December 2004 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)). Claims 1-12, 14-21, 23 and 26-34 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected inventions/species, there being no allowable generic or linking claim.

Specification

2. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Double Patenting

3. A rejection based on double patenting of the "same invention" type finds its support in the language of 35 U.S.C. 101 which states that "whoever invents or discovers any new and useful process ... may obtain a patent therefor ..." (Emphasis added). Thus, the term "same invention," in this context, means an invention drawn to identical subject matter. See *Miller v. Eagle Mfg. Co.*, 151 U.S. 186 (1894); *In re Ockert*, 245 F.2d 467, 114 USPQ 330 (CCPA 1957); and *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970).

A statutory type (35 U.S.C. 101) double patenting rejection can be overcome by canceling or amending the conflicting claims so they are no longer coextensive in scope. The filing of a terminal disclaimer cannot overcome a double patenting rejection based upon 35 U.S.C. 101.

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4. Claim 24 is rejected under 35 U.S.C. 101 as claiming the same invention as that of claim 1 of prior U.S. Patent No. 6,809,861 B2. This is a double patenting rejection.

5. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 13 and 22 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 1 of U.S. Patent No. 6,809,861 B2. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims of the instant application are merely broader than or an obvious variation of the claim of U.S. Patent No. 6,809,861 B2.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Shioda et al., U.S. Patent No. 6,081,371 in view of Koyama et al., U.S. Patent No. 6,226,118 B1.

Regarding claim 13, Shioda et al. discloses an optical apparatus (fig. 1) with an observation apparatus having an objective (4), and observation optical system unit including a variable magnification optical system (5) and an imaging optical system unit including an imaging lens (6) and an eyepiece (7), and an illumination apparatus which is removeably attached to the observation system (in at least so far as it can be broken and removed) including a light source (not shown, column 6, line 2), a distal end illumination unit placed in close proximity to the objective (column 5, lines 57-59), and an illumination optical system placed between the light source and the distal end illumination unit to lead illumination light from the light source to the distal end illumination unit (15, 16, 17), wherein the distal end illumination unit is placed at a periphery of the objective so that the center position of an observation optical system in the observation optical system unit and a center position of illuminating light applied by the illumination apparatus coincide with each other on a surface of the sample (fig. 1 and column 7, lines 34-47), and wherein the illumination optical system has at least one movable lens unit and a moving mechanism so that the movable lens unit moves in accordance with a change in magnification of the observation optical system to make an observation area and an illumination area coincident with each other (column 5, lines 65-67). Shioda et al. lacks the illumination apparatus being fluorescence illumination wherein a first wavelength selecting member for selectively transmitting light in a specific wavelength region is placed between the light source and the distal end illumination unit and a second wavelength selecting member for selectively transmitting light in a wavelength region of fluorescent light emitted from the sample is placed

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between the objective and the imaging optical system unit. Koyama et al. teaches an optical apparatus (fig. 1) with fluorescence illumination wherein a first wavelength selecting member (11) for selectively transmitting light in a specific wavelength region is placed between the light source (23) and a distal end illumination unit (10) and a second wavelength selecting member (13) for selectively transmitting light in a wavelength region of fluorescent light emitted from the sample is placed between the objective (21 or 22) and the imaging optical system unit (14, 15). It would have been obvious to one of ordinary skill in the art at the time the invention was made to use fluorescence illumination and the wavelength-selecting members as taught by Koyama et al. in the optical apparatus of Shioda to provide a different illumination on the sample.

8. Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over Shioda et al. in view of Koyama et al. as applied to claim 13 above, and further in view of Uehara, U.S. Patent No. 4,498,742.

Shioda et al. in view of Koyama et al. as applied to claim 13 above, discloses the claimed invention except wherein the distal end illumination unit includes an optical member having at least two toric surfaces. Uehara disclose an illumination optical arrangement that includes an optical member having at least two toric surfaces (column 5, lines 60-68). It would have been obvious to one of ordinary skill in the art at the time the invention was made use the illumination optical arrangement of Uehara in the system of Shioda et al. in view of Koyama et al. to provide high illumination efficiency (column 1, lines 58-59) on the sample.

Allowable Subject Matter

9. Claim 25 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

10. The following is a statement of reasons for the indication of allowable subject matter:

Claim 25 is allowable over the prior art for at least the reason that the prior art fails to teach and/or suggest “satisfies the following conditions: $|My| < |Mx|$ and $0.8 < (|My| < |Mx|)/\cos \theta < 1.2$ wherein θ is an angle formed between the optical axis of the illumination optical system exiting the distal end illumination unit and the optical axis of the objective; Mx is projection magnification of the optical system of the distal end illumination unit in a direction of a minor axis of an elliptical illumination area formed on the sample when it is illuminated at the angle θ with a rotationally symmetric optical system, which is obtained by $Mx = I/Ix'$, where I is the sample and Ix' is a sample image formed by the distal end illumination unit; My is projection magnification of the optical system of the distal end illumination unit in a direction of a major axis of an elliptical illumination area which is perpendicular to the direction of the minor axis, the projection magnification My being obtained by $My = I/Iy'$, where I is the sample and Iy' is a sample image formed by the distal end illumination unit” as set forth in the claimed combination.

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Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The following patents disclose microscope systems with distal end illumination units: U.S Patent Nos. 4,871,245; 5,140,458; 5,627,613; 5,760,952, 6,236,502 B2; 6,392, 797 B2; 6,603,537 B1 and German Patent Publication No. DE 3427592 A1.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lee Fineman whose telephone number is (571) 272-2313. The examiner can normally be reached on Monday - Friday 7:30 - 4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Drew Dunn can be reached on (571) 272-2312. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



LAF
March 2, 2005


MARK A. ROBINSON
PRIMARY EXAMINER